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ABSTRACT

The continuing development of educational professionals (teachers and administrators) takes place in three types of institutions. Advanced degree programs offered in colleges and universities that lead to the master's and doctorate degrees are the mainstay of continuing development. Second in importance are the staff development programs sponsored by local education agencies and regional and state education agencies. Professional organizations also play an important role in the personal and professional development of teachers and administrators. This paper examines the role of local education agencies in inservice education and staff development. It includes a brief and selective review of the research on inservice education of teachers and administrators, and discusses the experience of the Pittsburgh, Pennsylvania, School District's research-based programs in staff development for teachers and administrators. (JD)

POST CERTIFICATION DEVELOPMENT OF TEACHERS AND ADMINISTRATORS*

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INTRODUCTION

This paper will focus on the continuing development of teachers and administrators after they receive the baccalaureate degree. The continuing development of the educational professional takes place in three types of institutions. Advanced degree programs offered in colleges and universities that lead to the master's and doctorate degree are the mainstay of continuing development. Second in importance are the staff development programs sponsored by local educational agencies, regional and state educational agencies. Professional organizations (e.g. Association for Supervision and Curriculum Development, American Association of School Administrators) also exert an important role on the personal and professional development of teachers and administrators.

The primary emphasis of this paper will be to examine the role that local educational agencies play in inservice education or staff development. Part I will deal with a brief and selective review of the research on inservice education of teachers and administrators. Part II will present the experience of the Pittsburgh, Pennsylvania, School District's research based programs in staff development for teachers and administrators know as PRISM (Pittsburgh's Research-based Instructional Supervisory Model).

The Current Status of Inservice Education

A variety of reports filed on American public education in 1983 and 1984 raised serious doubts about the quality of education in this country. A Nation at Risk (1983) led the way in calling for fundamental improvements in the performance of teachers and administrators in the nation's public schools. Many other national reports such as Boyer's (1983) High School, Goodlad's (1984) A Place Called School, Sizer's (1984) Horace's Compromise, to cite just a few, call for substantial reform at all levels of public schooling and in the preparation of teachers and administrators. Extensive staff development will be required if the nation is to meet the challenge for school improvement. Teachers and administrators must become more accountable and productive if quality is to be restored in American Public Education.

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In the long run, improvement in the performance of teachers and students in the public schools will require intensive analysis of the programs offered by teacher training institutions. Also, positive changes must be made in the recruitment and selection of teachers and administrators who enter the profession. In the meantime, however, attention must be focused on ways and means of improving the quality of performance of professionals in the field.

Staff development for teachers and administrators takes on added importance for many school districts in the Northeast and Upper Midwest. In those areas, schools are being closed because fewer children are available to be educated. Declining birth rates have resulted in the closing of many schools. Young teachers in those areas of the nation are being furloughed and, as a result, little "new blood" is coming into districts. For example of the 2,900 teachers in the Pittsburgh Public Schools, only 8 are currently in their first three years of teaching. Thus, if schools are to improve their performance, emphasis must be placed on the continuing professional development of teachers and administrators.

Lanier (1984) in reviewing the research on the demographics of preservice and inservice teachers notes that the group of inservice teachers is becoming much more stable than ever before in this century. However, she points out that the most academically able teachers are leaving the professions while the less academically able remain thus making the job of staff development more difficult.

Inservice Teacher Education

The continuing professional development of educators, both teacher and administrators, is big business. Yarger (1982) estimates that for every ten teachers or administrator in the United States there is one person who is engaged in the continuing professional development of those educators. These persons include college professors, local education agency trainers, and staff development personnel in state or regional education agencies and professional organizations.

While there is much rhetoric about the inservice teacher education programs offered at all levels of schooling there is no substantial body of research knowledge with regard to its procedures or its outcomes according to Yarger (1982). Further, Yarger points out that there is no reliable information on the content of inservice teacher education.

> "The state of existing knowledge is less than one would desire, leaving little choice but to speculate and make high inference judgments. Although inservice education does have content, is delivered in some format, and serves several purposes, the ability to learn about it and communicate about it succinctly and with certainty is difficult in the early 1980's."

Yarger identifies the lack of precise language to describe or communicate about the inservice training of teachers as a serious problem. Further, he points out that there are virtually no generalizable or replicable studies of inservice training of teachers. The work of Joyce and Showers (1980, 1982) to be presented stands out as a serious attempt to inform and influence the design of inservice training of teachers based upon research studies.

It is unlikely that there will ever be enough research or even full scale evaluation of the typical inservice programs for teachers and administrators. According to Yarger (1982) this relates to the fact that there is no single institutional base for inservice training. Teachers and administrators may pursue courses at colleges and universities or attend workshops and seminars sponsored by local, regional or state educational agencies. Professional organizations also sponsor continuing education workshops. Thus no single organization takes sole responsibility for inservice development of the educational professional.

In addition to the fact that no single institution takes responsibility for the development of teachers Lanier (1984) points out that staff development programs within most school districts are uncoordinated. Lanier reports that professional development programs in schools and in higher education institutions tend to be programmatically isolated and politically weak. Further, she notes that within school districts many people are involved in staff development without knowing what others in the same district are doing. In recent years staff development in local school districts has grown in importance but not in quality, according to Lanier.

The Findings of Teacher Effectiveness Research

Data emerging from "teacher effectiveness research" has equal applicability to preservice and inservice teachers according to Berliner (1984) and Lanier (1984). In a broad review of the research on teaching, Berliner (1984) reports the findings of studies related to pre-instructional, during instruction and post-instructional factors. One example of pre-instructional factors cited by Berliner is the work of Cooley and Leinhardt (1980) that indicates that opportunity to learn was the most important factor in accounting for student learning. Typical of the during instruction factors related to effective teaching is the work of Rossmiller (1982) who demonstrates that time on task is consistently and strongly related to student achievement in reading and mathematics. An example of post-instructional factors is the work of Gage and Berliner (1984) that indicates that substantial use of corrective feedback shows positive relations to student achievement and attitude.

The management of instructional time, the pacing of instruction, the formation of student groups, the types of learning activities are significant factors within the control of teachers in the pre-instructional phase, according to Berliner. All of the preceding have an impact on student learning. Berliner urges teachers to be aware of the power of their decision making with respect to student achievement, attitudes and classroom behavior.

The research based variables of engaged time, time management, success rate, academic learning time, monitoring, structuring and questioning all have significant influence on student achievement. Berliner advocates that the power of any single variable is limited; however, when used in combination they are more likely to produce a positive impact on student learning.

According to Berliner, climate variables that influence achievement include: 1) communicating academic expectations for achievement; 2) developing a safe, orderly and academically focused environment for work; 3) implementing swift, effective and fair ways of handling student behavioral deviancy; and 4) developing cooperative learning environments. All of the above variables tend to promote the positive ethos required to create conditions for effective pupil learning.

Berliner asserts that the available research evidence indicates that when the findings of research on teaching are used to train teachers, student achievement is positively influenced. He contends that the research he reviewed provides a reliable research base for inservice as well as preservice training of teachers.

Inservice Education of Administrators

The continuing education of administrators is located in degree and certificate programs in colleges and universities. A significant body of descriptive literature exists with regard to the potpourri of courses offered to prepare administrators for American schools. Silver (1982) points out that the majority of students who pursue administrative training and credentials through degree programs have full-time teaching jobs. Data collected from a variety of studies indicate that students in administrative preparation programs are typically local people who have been raised and educated in the vicinity of the university or the college where they pursue their graduate education. Silver notes that relatively few are full-time students.

Silver (1982) points out that programs in the early part of this century for the preparation of administrators typically focused on "war stories." The training of administrators prior to 1940 tended to center on the experiential nature of the job of principal or superintendent as described by retired or practicing administrators who taught administration courses at the college and university level. Since the 1940's and 1950's administrative training programs have witnessed the introduction of

scientific management programs (e.g., management by objectives) with subsequent emphases on human relations, organizational development, behavioral science, administrative theory, and organizational behavior. The competencies that are most frequently emphasized in administrative preparation programs are conceptual and analytical skills. Textbooks, lectures, discussions tend to dominate the delivery of the program. In a few instances, case studies, simulation, role playing, internships and field experiences may be used to deliver courses. It is important to note that very little research exists with regard to the process by which the continuing development of administrators is carried out. Further and most importantly Silver points out that there is virtually no research with regard to the impact of administrative training programs upon the subsequent behavior of professionals in administrative roles.

The Findings of School Effectiveness Research

The growing body of school effectiveness research in the 1980's has significant implications for the inservice and preservice training of school administrators. Researchers such as Brookover (1981), Edmunds (1979), Rutter (1979) and Hall (1982) have identified critical variables that differentiate effective schools and principals from ineffective schools and principals. Among the most important of the variables that differentiates effective from ineffective schools is the positive instructional leadership of the principal. It is not known at this time what background, training or experiential variables are related to effective instructional leadership behaviors. However, many school districts are designing and implementing effective school leadership training programs based on inferences drawn from the research on effective elementary and secondary schools.

The work of Hall (1982) provides insights into the role of elementary principals who are effective change facilitators. Hall and his colleagues have identified behaviors that successful innovators use when implementing new programs in elementary schools. These findings tend to suggest the type of inservice training that might prove to be effective in promoting effective leadership to bring about change in the schools.

Cohen and Manasse (1982) point out that the study of effective principal behavior has resulted in a better understanding of the knowledge base and skills that principals need. It appears to Cohen and Manasse that current preservice and inservice programs fail to provide the appropriate mix of theory and practice that facilitate the development of instructional leadership behavior in principals. Further, they point out that principals need better organizational skills and process skills related to the

management of their schools if they are to maximize conditions for learning for pupils.

General Evaluation Findings of Inservice Programs

A plethora of evaluation reports are available on inservice training activities that focus on the response of participants to the content and the delivery of workshops, seminars or activities. In such reports participants are asked to respond to a questionnaire that probes the quality of the presentation and the relevance of the content to one's current job. There is generally no assessment of the content of inservice programs in terms of knowledge outcomes; typically no attempts are generally made to evaluate behavior change as a function of inservice programs.

Studies of the perceptions of teachers to inservice training programs tend to yield the following data. Lawrence (1982) found, in a review of evaluative studies of in-service programs, that teachers judge programs to be effective if they: 1) individualize approaches to the topic; 2) require active involvement of the participants; 3) demonstrate skills to be employed by teachers and provide feedback; 4) involve teachers in the development of the program; 5) proceed in a sequential pattern rather than in "one-shot deals"; 6) encourage attendance rather the prescribe attendance.

At best, one could infer from evaluative studies that the vast majority of inservice training programs may raise the level of awareness of participants with regard to issues, new instructional techniques, program content and the like. There is ample evidence (Yarger, 1982) to indicate that teachers and administrators will willingly pursue inservice activities provided that they perceive them to be related to their particular job responsibility.

If one were serious about evaluating the effects of inservice training then one would have to go far beyond the level of sampling participant perceptions to an immediate experience. A serious attempt to evaluate or research the impact of inservice training would require that measures of the effects of inservice programs on knowledge outcomes and/or skilled behavior would have to be conducted. Further, and most importantly, one would have to attempt to measure the effects of what has been learned by teachers and administrators upon the behavior of their clients-students and staff.

With respect to each of these levels of evaluation, as previously mentioned, there is considerable evidence about the perception of teachers of the experience. At the level of knowledge outcome and behavior change there is sufficient evidence to support some very clear propositions to guide training and evaluation research. However, there is virtually no evidence from evaluation studies to indicate that inservice activities produce any increase in student learning whatsover.

Teacher Centers

Teacher centers were one form of teacher inservice education that evolved from the support of the U. S. Office of Education during the 1960's and the 1970's. Teacher centers were designed to provide an opportunity for teachers to come together to direct and pursue their own professional self development. The teacher center movement grew out of a variety of federal initiatives over a period of time designed to improve the quality of teaching in the schools. They were modeled after teacher centers in England.

Studies with regard to the effectiveness of teacher centers report a high degree of satisfaction on the part of teachers. The data (Nemser, Applegate 1982) suggest that teachers participating in teacher center activities developed a sense of "community" and sharing among each other; they tended to give and receive advice from one another; they practiced teaching techniques upon each other in hopes that those techniques will be transferred to more effective ways of teaching students. Applegate (1982) suggests that the exchange of practical experience among teachers attending a teacher's center is probably one of the most powerful ways of improving teaching. However, very little evidence exists regarding the impact of the teacher center experience upon teacher changed behavior and/or the impact of that experience upon student learning.

The Design of Inservice Programs - Lessons from Research

Joyce and Showers (1980) reviewed over 200 studies of inservice training of teachers in an attempt to identify some well defined underlying principles that might guide efforts to improve inservice education. They identified two different kinds of inservice activities: 1) those directed toward the mastery of new techniques; 2) those directed toward fine tuning existing skills of teachers. The results of their review indicate that effective inservice programs for teachers and dministrators have the following components: 1) presentation of theory; 2) modeling of the behavior by significant others; 3) opportunities for participants to practice new behaviors; 4) provisions for feedback; 5) coaching for application of skills. In general, Joyce and Showers found that modeling of behaviors followed by practice and feedback can be very powerful in achieving skill development and transfer of learning to new situations.

Joyce and Showers (1982) have continued their efforts to promote more effective inservice programs by focusing on the coaching of teaching, the fifth dimension identified. The process of coaching is described as one where teachers are given technical feedback by trained professionals who also provide supportive companionship to teachers in their efforts to improve their repertoire of instructional skills. The purpose of

coaching to application is to extend the executive control of teacher instructional behavior. That is, the coach attempts to develop in the trainee, through continuous feedback, the integration of new behaviors into the instructional repertoire of teachers such that the new behaviors become a natural part of the instructional sequence. Coaching also provides an opportunity for a trainer to adapt instruction to the specific needs of the trainee. A significant part of the coaching process results in personal facilitation within a "safe environment" where teachers have an opportunity to practice new behaviors and receive feedback in a non-threatening, non-evaluative environment. Joyce and Showers (1984) have found that the opportunity to study the theoretical base and/or the rationale for the new behavior as part of the process of providing demonstrations, practice and feedback tend to enhance the effectiveness of inservice training. They identify coaching as the key to the transfer of new skills into the active repertoire of a teacher. Finally Joyce and Showers stress that teachers must organize themselves into groups in support of one another in order to promote the development and acquisition of new skills or to fine tune existing skills if they are to achieve effective transfer to daily instructional practice in the classroom.

Guidelines for Inservice Training of Teachers and Administrators

In addition to the research of Joyce and Showers, one can also turn to the literature on adult education and on adult development as a source of guidance for inservice training. Knowles (1973) advises inservice educators to look to the discipline of andragogy for guidance in the development of adult learning experiences. The field of andragogy deals with adult development and how adults learn when compared to the way that adolescents or children learn. One of the more significant findings from the field of andragogy indicates that adults typically have a deep psychological need to be perceived by others as being self-directed. Thus, adults should be involved in significant ways in planning the experiences that are to guide their self development. Further, they must be allowed sufficient opportunities to individualize learning experiences in order to increase the likelihood of positive learning outcomes.

From the perspective of an adult educator, Knowles (1973) points out that experiential learning techniques which draw upon the experience of adults and use experience as a resource for learning are likely to be more effective. Adults generally perceive active learning experiences that are characterized by discussion, simulation, field experience, team projects, and action learning techniques as more effective than passive learning experiences.

Much of the theory which guides adult learning comes from psychotherapy. Rogers (1962), Maslow (1962) and others support the notion that adult development is a continuing process of becoming. To a child, experience is something that happens to him or her. To an adult, experience is what that person is! Thus adult learning should be experiential in nature, drawing upon the life experiences of adults while engaging them in new experiences.

Knowles further identifies enhancement of self as one of the forces that creates a positive condition for adult learning. It should be noted that some adults engage in self-development learning as a social experience of engaging in activity with others for the mere joy of being with others. Finally, goal orientation and goal fulfillment is perhaps the single most powerful force in driving adult learning. Adults who wish to achieve professional or personal goals in life through acquisition of knowledge and skills possess the intrinsic motivation to drive them to achieve those goals. These factors dealing with the active experiential nature of adult learning, the need for self direction and the goal orientation of adults must be taken into account in planning inservice training of teachers and administrators.

Summary and Implications of Research Findings

While Lanier (1984) concludes that studies of the "curriculum" of initial and continuing teacher education indicate that it is fragmented and shallow some progress has been made. Both Berliner (1984) and Lanier acknowledge that teacher effectiveness studies have demonstrated that teachers can acquire new knowledge and skills. However, Lanier contends that the emphasis in these demonstrations is that continuing teacher education is dominated with skill mastery with immediate application that tends to reinforce the notion that one requires little knowledge to be a good teacher.

A similar body of knowledge does not exist with regard to the continuing education of school administrators. However, the school effectiveness literature that identifies the role of the principal in producing the positive ethos that leads to increased student achievement holds some promise for future research and development.

There is no question that a vast amount of inservice training of teachers and administrators goes unresearched and unevaluated. Local, state and regional agencies conduct untold numbers of training sessions annually. As Yarger points out, there is a lack of specific language that might enable one to study the area constructively.

However, there are sufficient guidelines from research to enable the profession to improve the quality of inservice training of teachers and administrators. If we consider the proposition from andragogy that the adult need for self-direction is a powerful variable, then we must provide opportunity for self-direction in the planning and implementation of inservice programs. Additionally if we recognize that active involvement as opposed to passive engagement increases the effectiveness of training for adults, then we must insure that adults are actively engaged in the learning process. And, finally if we develop the design of inservice training from the research of Joyce and Showers (1980) th[illegible] will insure that there are opportunities for: presentation of theory; modeling of new techniques; practice of new behaviors; feedback on practice, and coaching to application. If we apply the above, then we increase the likelihood of providing effective inservice training for teachers and administrators.

PART II

THE PITTSBURGH PLAN

Assessing the Needs of the District

In September 1980 the author assumed the Superintendency of the Pittsburgh Public Schools; a need was perceived to focus the attention of the Board of Education on the district's problems that were of greatest concern to them. This was judged to be important if the author was to have an opportunity to provide effective educational leadership for the district and if the Board, the staff and the general public were to develop a sense of movement toward the resolution of the district's problems.

The author initiated the design of a Needs Assessment Survey that was conducted by Dr. William Cooley (1981) and his staff at the Learning Research and Development Center, University of Pittsburgh. The survey was developed and pilot tested in October 1980; the full scale community survey was completed by the end of November. The data were analyzed in December 1980 and presented to the Pittsburgh Board of Education in January 1981. It is important to understand that the Needs Assessment Survey took two forms: (1) a survey to identify the perceptions of the improvable conditions in the district from a wide array of persons both within the broad community and within various district employee groups; (2) an analysis of existing data that might shed additional light on problems identified through the survey.

The broad based district and community survey, termed the "Dynamic Survey," sampled the perceptions of all levels of employees in the district, including but not limited to clerks, custodians, teachers, administrators and board members. Business and community leaders, parents of children in the public schools and private schools, as well as the public at large, were also surveyed. The "Static Survey" dealt with the analysis of data available from the records of the Board of Public Education. These data included such indicators as pupil attendance records, student achievement, teacher absenteeism, and the like. The purpose of this static survey was to see what, if any, relationships existed among the data that might be useful in the Board's priority setting and the district's educational improvement planning.

Board Priorities

In January 1981, the Board of Education met in an all-day session to review the data from both surveys. Following the data presentation, the Board deliberated and

reached consensus on two major priority areas: School Improvement and Cost Effective Management. In the area of School Improvement, the Board further identified six school improvement priority areas: (1) improving student achievement; (2) improving the effectiveness of personnel evaluation; (3) managing enrollment decline; (4) improving the ability of the district to attract and hold students; (5) improving the quality of school discipline; and (6) improving the performance of low achieving schools.

In February 1981, the Pittsburgh Board of Public Education, in its formal legislative session, voted these priorities as the primary agenda of the school district. The Board also charged the administration to develop and submit plans to address each of the areas listed in the priority statements by July 1, 1981. Those plans were delivered in July 1981; the Board of Education took the summer to review them. In September 1981, the Board formally approved the priority plans as submitted.

One of the major initiatives undertaken to address the Board's priorities will be presented: Pittsburgh's Research-based Instructional Supervisory Model (PRISM).

Pittsburgh Research-Based Instructional Supervisory Model (PRISM)

The Evaluation Priority

Improvement and Evaluation of Instruction (PRISM I)

Personnel evaluation was established as the district's second highest educational priority. In so doing, the Board of Education reflected its own views as well as those of community members and school district employees. Essentially, the survey data revealed that respondents believed that too many teachers and administrators were not performing their duties effectively, a condition which needed to be corrected.

The superintendent perceived that two alternatives were available to respond to this priority. The first alternative would have been to use the existing evaluation systems and embark on a "witch hunt" to identify ineffective personnel and then seek to demote or discharge them. The second alternative would be to seek to increase the quality of supervision and evaluation and set out to improve the performance of all personnel in the district. This approach would require that the performance expectations for all personnel be carefully detailed and that persons be observed and provided with structured feedback to improve performance. The first alternative is clearly punitive in nature and was likely to produce a negative response among teachers and administrators. It probably would have created an atmosphere of negativism

that would have proven detrimental to the more positive improvement thrust of the Board. The second alternative is improvement oriented and is designed to make good teachers and administrators better while at the same time identifying those who need significant improvement. The latter approach would still induce some anxiety among teachers and administrators, yet it could be approached with a constructive spirit as it would provide persons an opportunity to improve their performance. The latter approach places professionals in a helping relationship with respect to each other to bring about a positive improvement in the state of educational affairs.

This more constructive approach was selected to improve personnel evaluation procedures and the general level of professional performance in the district. The plan became known as PRISM - Pittsburgh Research-based Instructional Supervisory Model. At present, there are three variants of PRISM in operation and a fourth in the planning stage. PRISM I is concerned with providing a consistent framework for the description, observation, improvement and evaluation of instruction at all levels in the district. PRISM II is directed toward improving the instructional leadership behavior of principals, supervisors and central office administrators. PRISM III is the district's effort to improve the quality of secondary education. PRISM IV is the elementary school version for the renewal of teachers and administrators. All four PRISM programs are designed to improve the effectiveness of instruction, supervisory leadership, and personnel evaluation and thus lead to a higher quality of student learning in the district.

Assumptions

PRISM I is based on the following assumptions: (1) personnel evaluation will be enhanced when teachers, adminstrators and their evaluators are engaged in a dialog that focuses on clear communication of expectations for job performance in that role; (2) a consistent framework of effective teaching based on research findings exists and it can be taught, learned and applied; (3) teachers, administrators, and supervisors can be trained to observe performance, gather evidence with respect to that performance and provide structured feedback that will cause that performance to be improved; and (4) if teachers and administrators are unable to improve their performance after careful role clarification, reasonable observation and feedback, and specific training, then action must be taken to terminate their employment.

Components

There are four essential components of PRISM I: (1) knowledge training; (2) skill development; (3) follow up coaching; (4) peer networks. The knowledge base of the model is derived primarily from the work of Madeline Hunter. Where appropriate, other research findings have been introduced to augment the model. Skill training focuses on the development of the ability to take anecdotal records of observations, records that are as close to verbatim records as possible. They are to be used in planning and carrying out the conference with the teacher. This aspect of the model is a variant of the Clinical Supervision model developed by Cogan (1973) and Goldhammer (1969). When elements of effective teaching are introduced, principals are given an opportunity to apply that knowledge by planning and conducting a lesson for their peers. They are observed and provided with structured feedback as a means of internalizing that knowledge while they simultaneously further the skill development of note taking, conference planning and conferring.

Follow up coaching is probably the most critical component of the model. At least once every four to six weeks each principal is visited by a "coach." The visit is designed to provide opportunity to jointly carry out an observation and conference, review aspects of the model that need clarification, analyze the monthly log of the principal and plan for future developments related to an individual principal's needs.

Establishing networks of colleagues was one of the major developmental efforts for PRISM I during the 1983-84 school year. The ongoing acquisition of knowledge and skill required for effective leadership in the schools principals should meet periodically in support groups. The support groups were designed to allow for peer interaction to stimulate the further development of knowledge and skills to improve instruction. It is assumed that each principal has some knowledge or skills that can be shared with others and thereby contribute to the common good.

Development

The superintendent convened a task force of teachers, administrators, and central office personnel in March 1981. That task force was charged with the responsibility to develop a plan which would address the Board's priority of personnel evaluation. The task force spent four months reviewing a variety of approaches to personnel development and evaluation. It recommended to the Board that the district adopt and implement a modified version of an instructional model developed by Madeline Hunter

(Hunter, 1978) and a clinical supervision process as the vehicle to address effective performance by teachers.

The model was adapted from a similar program developed for the Norfolk, Virginia, Public Schools by Dr. Theodore Forte. Forte had modified the Hunter materials to meet the needs of his district. He was retained as a consultant by the Pittsburgh District to train a team of four staff development associates appointed by the Board to address this priority area. The four staff development associates were selected from the ranks of the district's principals and central office personnel. The staff development team was trained initially by Forte, and subsequently by other educators well experienced with the Hunter model; they were assigned to train all administrators and teachers in the district in the PRISM model.

How it Works

Beginning in September 1981, all administrators in the district were required to attend 30 hours of training on the PRISM model. All central office administrators, including the Superintendent and Assistant Superintendents were trained. By the end of the 1981-82 school year, all principals and supervisors had received initial training and were using PRISM with selected staff to become more skillful in using the model. In the summer of 1982, the principals taught a special two-week summer session for students. This summer school provided them with an opportunity to teach students themselves while using the instructional model. As they taught, they were observed by their peers and received feedback from them regarding the effectiveness of instruction. This provided a mechanism through which both instructional and supervisory skills could be refined simultaneously.

During the 1982-83 school year, all principals were expected to conduct a minimum of three observations and follow-up conferences per week. They were required to keep records of the observations. These included the subject and grade level observed, the focus and style of the conference and the specific improvement strategy. The data describing these observations were carefully monitored by the staff development team. Additionally, each of the staff development team members was assigned a specific number of principals for whom he or she was responsible. These staff development associates functioned as coaches for the principals, and were required to co-observe and co-conference with them at least once a month to insure that the principals had internalized and operationalized the instructional model efffectively. This same process is being used in the 1984-85 school year.

PRISM reflects the first segment of the response to the Board's priority regarding effective personnel evaluation. It has established the criteria for effective instruction. PRISM I has provided principals with specific classrooms observational skills including anecdotal note taking, analysis of notes to obtain specific data for the teacher conference, conference planning, and conducting conferences to promote instructional improvement. All of this was done in a method whereby each of the administrators was required to go through a plan-teach-observe-confer cycle at each stage of training. This was in done order that he/she would internalize the model through actual practice. The program was focused on improving performance in instructional observation and conferencing skills as well as increasing knowledge.

Results to Date

In 1984-85 PRISM I is in its third full year of operation. During the first year, principals and supervisors were trained in the fundamentals of the PRISM Model and given guided practice in its application. During the first year, emphasis was placed on developing the knowledge of effective instructional skills as well as performing instructional observation analysis and conferring skills. Principals were asked to work with a few selected teachers and to concentrate on observation and conferring directed toward the reinforcement of effective teaching techniques. This was done in order to provide a positive experience for both teachers and principals. Over time, principals were provided further knowledge training and extended their skills to all types of conferences with teachers.

A survey conducted by Salmon-Cox (1983b) provided formative evaluation data to the Staff Development Team. The general results noted an unanticipated high level of enthusiasm for the program. The data indicate that the principals are taking the program seriously. Many constructive suggestions were offered by the principals to improve the efficiency of the program. One of the most salient findings of the survey compared responses of principals in 1980 and 1983 with respect to criteria for teacher evaluation. As part of the needs assessment survey the principals responded to the following question: "A serious problem I face is a lack of good criteria by which to evaluate teacher instructional effectiveness." In 1980 87.5% of elementary principals, 50% of middle school principals, and 71.4% of secondary principals agreed that this was a problem. In 1983 only 13.3% of the elementary principals, 6.7% of the middle school principals, and 25% of the secondary principals responded that this was a problem.

Improvement of Instructional Leadership of Administrators and Supervisors (PRISM II)

PRISM II is the District's program to improve the instructional leadership skills of principals, supervisors and central office personnel. PRISM II has been developed because most principals have not been trained as instructional leaders; degree and certificate programs for administrators have tended to focus primarily on the management aspects of schooling. Many administrators are not prepared to cope with the current emphasis on instructional leadership. Not only has their training failed to prepare them to assume this role, most school boards and school districts have not expected them to provide instructional leadership. Principals, often were selected for their positions because they are good at public relations or good at maintaining discipline. More often than not, supervisors of instruction at the elementary, middle and secondary level are somewhat better prepared to offer "content centered" instructional leadership. However, they often lack the status and the power to exercise potent leadership. Thus with the new emphasis on educational improvement, the nation finds its schools under the direction of many principals who are not well prepared to assume this new instructional leadership role.

Assumptions

PRISM II is based on the following assumptions: (1) instructional leadership can be defined, implemented, and evaluated; (2) all principals can become instructional leaders; (3) most principals will need substantial training in order to develop the knowledge-base and the skills to provide instructional leadership; and (4) the process of developing instructional leadership can be facilitated by establishing collegial networks of administrators.

Components

PRISM II overlaps significantly with PRISM I. At this time, the District is still working to define the concept of instructional leadership and develop a framework of the knowledge and skill components necessary to develop a long range plan. The training workshops, and the coaching of PRISM I serves as the foundation for PRISM II. The knowledge of the components of effective instruction and the skill in observing and improving instruction is the cornerstone for instructional leadership. Beyond PRISM I, however, principals and other administrators must have a knowledge-base with regard to curricular models and instructional techniques. Principals need to know enough about organizational development and the educational change process to furnish an environment for teachers that is likely to produce a focus on instruction.

The Pittsburgh School District has provided summer workshops for principals covering such topics as the role of questionning techniques in improving instruction. Workshop time has been devoted also to the development of school-based plans for the instruction of faculty members in the components of PRISM I.

Currently a committee of principals, supervisors and central staff is working with the staff development team to: (1) implement a curriculum and communication component of instructional leadership; (2) create a system of networks to provide support for principals; and (3) establish a resource bank of professionals who can assist in the leadership training process.

Plans are now being developed in collaboration with school administrators in Allegheny County (in Southwestern Pennsylvania) to implement a Principals Academy that will serve the entire region. The academy will serve some of the instructional leadership needs of Pittsburgh city administrators.

Unfortunately, instructional leadership remains a somewhat elusive concept. It is easy to identify instructional leadership when one sees it; one also knows when it is not present in a school. While there is a considerable body of literature with respect to leadership per se and a vast body of literature with respect to curriculum and instruction, the roles of principal and superintendent as instructional leaders remain basically unresearched and in need of more complete definition, development, and documentation.

Results to Date

Data gathered with respect to the implementation of PRISM II indicate that over two thirds of the principals in the district have embraced and put into operation the concepts implicit in the model. The final third of the principals are still struggling with many aspects of the model. Significant growth in acceptance and effective implementation of the model occured during the 1983-84 school year. Administrators have been evaluated over the past three years on the extent to which they have cooperated with the staff responsible for the PRISM I program. Evaluation systems have been developed to rate principals on the effective implementation of PRISM in their schools especially as they relate to student achievement. The results also indicate that we need to provide more effective ways for principals to process and use information that informs them of what is going on in the school instructionally. This may require different formats for presenting information and additional training in use of data.

The Schenley High School Teacher Center (PRISM III)

The Schenley High School Teacher Center is the Pittsburgh School District's response to the Board of Education's priority to increase the effectiveness of instruction at the secondary level. It also reflects the district's need to reduce the high school drop out rate. In 1980, 35% of the students who entered grade 9 in 1976 failed to graduate from grade 12. Even more startling is the fact that 28% of 9th graders fail to achieve sufficient credits to become bonafide 10th graders. These significant problems demanded attention.

Plans to improve the effectiveness of instruction at the secondary level and to improve our ability to keep students in school resulted in the development of a proposal to the Board of Education that one of our secondary schools become a teacher center. The plan was to create a "model" secondary school for teaching and learning for the district. (Wallace, Young, Johnston, Bickel and LeMahieu, 1984) Further, it was proposed to the Board that all secondary teachers in the district be provided with a "mini-sabbatical" at this model school that would be designed to improve their teaching skills and update their knowledge of their academic field. The plan called for the Board to restaff this school with the most able teachers in the district. The plan was approved by the Board and the Schenley High School Teacher Center was initiated in 1982. Intensive detailed planning for one year paved the way for the Center's opening in August, 1983.

Teacher Center Goal

The primary purpose of the Schenley High School Teacher Center is to provide a teaching and learning experience for each secondary teacher in the Pittsburgh Public Schools. Teachers have an opportunity to: (1) to observe exemplary instructional activities in a real setting; (2) to sharpen their current instructional skills by practicing new instructional techniques; (3) to receive clinical feedback on that practice; (4) to translate theory into practice; (5) to receive an update in their specific subject matter areas; (6) to review the latest research findings in effective teaching; and (7) to obtain a broad perspective of modern youth culture and its implication for effective teaching.

A secondary purpose of the Teacher Center is to provide an opportunity for teachers to engage in independent study to create something that will be useful to them in their home school. Opportunities are also provided to engage in externships with business, industry or higher education to provide an enriched backgroud for teaching.

The Schenley High School Teacher Center provides a realistic site for teachers to teach and learn. The program for students is one that could be replicated at any other high school in the Pittsburgh Public Schools. The current program offerings, both regular and magnet, will be maintained and expanded in terms of the quality and variety of instructional techniques. New magnet programs have been launched in high technology and international studies to provide exceptional educational opportunities to students throughout the city, and to promote the voluntary desegregation of that school.

Assumptions

The Teacher Center program is based on the following assumptions: (1) that secondary teachers can be engaged productively in a "clinical experience" that will cause them to reflect upon and improve their teaching techniques as they observe other teachers, analyze instruction, teach and receive feedback on their own instructional techniques; (2) that we can develop an instructional dialogue that will tend to break down the professional isolation experienced by most secondary teachers; (3) that by providing opportunities for teachers to participate in lectures and seminars they will upgrade their skills and knowledge in their content area; (4) that by participation in seminars on adolescent development and related topics, teachers will gain greater understanding of and increased skill in dealing with today's urban youth.

Components

The general structure of the teacher's experience includes three phases: (1) orientation; (2) direct involvement; and (3) reinforcement and support.

The first phase (orientation), is conducted by members of the Schenley High School Teacher Center staff in conjunction with individual teachers, building principals and supervisors in the sending school. This phase involves the identification of each individual teacher's needs and the generation of an individualized study plan for each teacher within the parameters of the programs's components. It is intended that these plans will reflect both the individual teacher's and home school's needs.

The second phase (direct involvement), has been based on an extensive needs assessment of our secondary teachers. It takes place at the Teacher Center. It includes but is not limited to the following:

a. Participation in seminars with peers and center staff, as well as university, business and industrial personnel;

b. Involvement in a clinical experience, including observation of effective teaching, planning, actual teaching, and conferences;

c. Fulfillment of individual study plan requirements which may include working with university, community and/or business resources;

d. Training in appropriate new technologies including use of instructional media and computers.

This phase occurs over an eight-week period aligned with one of the four quarters of the school year. Specially trained replacement teachers teach the classes for the visiting teacher while he or she is at the Center.

The third phase (reinforcement and support) occurs at the home school. The purpose of this phase of the program is to ensure the retention of and to support the teachers in the use of the skills and knowledge acquired at the Center. This assistance will be a responsibility shared by the Center staff, the home school and other staff, all of whom will have been appropriately trained.

Staff

The staff of the Schenley High School Teacher Center is among the best in the School District. All are fully-certified secondary teachers who either applied or were recruited for their positions. A prerequisite for appointment was a willingness to make the commitment to the overall objectives of the Teacher Center. The full cooperation of the Pittsburgh Federation of Teachers was important in bringing about a successful opening.

The entire staff received intensive training and practice in the principles of effective instruction. Some resident teachers teach a reduced load of four classes and, in the remaining time, teach a series of seminars on adolescent development, orient teachers coming to the Center, monitor research activities of peers, serve as a model of exemplary teaching, supervise the clinical component of the Teacher Center and perform conventional faculty duties.

One third of the resident staff serve as Clinical Resident Teachers. Each clinical resident teacher works with two visiting teachers in the "teaching clinic," which is based on the district's model of effective instruction (PRISM). In this phase of

the training, the visiting teachers assist in developing lesson plans, observe effective teaching, and have an opportunity to practice the model. The clinical teacher then provides them with structured feedback.

The on-site Center staff is assisted by a cadre of 48 replacement teachers; these teachers are fully certified professionals whose teaching specialities represent the subjects offered at the secondary level. In the home schools they replace those teachers who, for the period of eight weeks, are taking part in the Teacher Center program as visiting teachers.

The administration of the Schenley High School Teacher Center is a shared responsibility. The principal is responsible for all programs affecting the students and staff within the framework of the high school. The Teacher Center Director is responsible for designing and implementing the program for visiting teachers.

Results to Date

At this writing the Teacher Center is in its second year of operation. Data are being gathered continually to assist in the development of program modifications in response to participant feedback. Initial work has begun on the development of an extensive long-term impact evaluation of the Teacher Center program.

Although the program is just beginning its second year of operation, several important trends in the data gathered thus far are noteworthy. Significant numbers of teachers across all cycles sampled report important personnel and professional accomplishments as a result of their time at Schenley. Areas of professional accomplishment include growth in their instructional skills, increased confidence in their teaching ability, and expanded knowledge in their academic area of teaching. Major trends reported as personal accomplishments by teachers included a renewed sense of enthusiasm for teaching, an increased sense of professionalism, and a pride and appreciation of their colleagues in the district. If one could identify the single strongest trend in these data it would be this sense of teachers broadening their horizons by working with their peers on profesionally significant tasks. These teacher self-report data have been confirmed in many instances by informal observations and comments made by principals and supervisors who work with teachers on follow-through activities. For example, it is clear from the data that returning teachers are playing significant roles in inservice programs for teachers in their home school. Principals are viewing returning teachers as important resources to their own efforts in improving educational practices in their buildings.

In order to assess whether the self-reported teacher impact holds up over time, a sample of teachers who participated in the second and third-cycles of the first year of the program were interviewed. The interviews took place approximatley two to four months after the completion of their cycle. Thirty-nine teachers were interviewed, representing over 40 percent of the teachers participating in those cycles. Over 90 percent of those interviewed reported significant professional accomplishments resulting from their experiences at Schenley. Many respondents went on to describe how techniques, concepts, etc., learned at Schenley were not being used in their own classrooms.

Of course, change does not come without some stress. Data collected from teachers clearly give evidence of anxiety among teachers prior to coming to the Center. Futher, feedback from individual teachers participating in cycles have been invaluable in assisting program managers in fine-tuning components of the program. One important issue that surfaced in this regard concerned the need to strike a balance between district-prescribed versus individual teacher identified activities. One trend in evolving the program has been to provide increased opportunities for individual teachers to identify and address specific professional needs.

Data gathered from a survey of students at Schenley High School tend to confirm a higher degree of expectation for their learning and increased homework demands. The students express positive reactions to the "new" climate in the school.

The student survey was repeated at the end of the first year of the Center and the findings corroborated the earlier findings. Students reported higher expectations than in the past, greater concern for learning on the part of new teachers, and a greater emphasis attendance and participation in school and classes. This new climate manifested itself in a considerable increase in student achievement in the school. In 1983, only 28 percent of students in the school scored at or above grade level in reading and 27 percent in language arts. Following the first year of the Schenley High School Teacher Cennter, those proportions had increased to 37 percent and 58 percent respectively.

The Schenley High School Teacher Center is one of the major efforts in staff development of the Pittsburgh school district. It is an outgrowth of the Board of Education's priority for school improvement. The structure of the program is consistent with the PRISM I and II programs designed to promote instructional effectiveness in teachers and instructional leadership skills in administators. A specific program

of school improvement in seven Pittsburgh elementary schools is also consistent with the general goals of Schenley High School Teacher Center program. Through the Schenley High School Teacher Center and other related programs, the Pittsburgh Schools provide a coordinated intervention strategy designed to promote more effective teaching and learning in the city schools.

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